What is claimed:

1. A method for producing an optimal configuration for a supply chain, the method comprising the steps of:

creating a supply chain model representative of the supply chain, said model defining one or more processes representing the activities within the supply chain;

defining optimization conditions for said supply chain model; and

determining an optimal configuration for the processes in said supply chain model in view of said optimization conditions.

2. The method of claim 1 further comprising the steps of: analyzing the optimal configuration for the supply chain;

reconfiguring the supply model as desired; and

re-optimizing the supply chain model.

3. The method of claim 1, wherein each of said processes is a make, move, purchase or sourcing process.

4. The method of claim 1, wherein the step of creating supply chain model comprises specifying one or more resources used or produced in each of the processes, wherein said processes are represented in equations representing the use or production of said resources.

5. The method of claim 4, wherein the step of determining an optimal configuration comprises performing linear programming using said equations.

6. The method of claim 4, wherein the step of determining an optimal configuration comprises performing mixed integer programming.

7. The method of claim 4, wherein the step of determining an optimal configuration comprising performing heuristics.

8. The method of claim 5, wherein the step of determining an optimal configuration comprising performing successive integer programming.

9. The method of claim 5, wherein the step of determining an optimal configuration comprising performing local searching heuristics.

10. The method of claim 4 further comprising the step of associating the resources to locations.

11. The method of claim 4 further comprising the step of defining a multi-tiered pricing for one of the resources.

12. The method of claim 4, wherein the multi-tiered pricing is directly determined.

13. The method of claim 4, wherein the multi-tiered pricing is cumulatively determined.

14. The method of claim 4 further comprising the step of specifying a constraint for said resources, said constraint limited the range of possible values for the resource in the optimal configuration.

15. The method of claim 14, wherein said constraint is hard, wherein said constraint cannot be broken in the optimal configuration.

16. The method of claim 14, wherein said constraint is soft, wherein said constraint can be broken in the optimal configuration at a penalty cost.

17. The method of claim 4 further comprising the step of specifying one or more units of measure for each of said resources.

18. The method of claim 4, further comprising defining the number of dimension for the resource.

19. The method of claim 1, further comprising the step of specifying a service level for one of the processes, whereby said service levels states minimum level of activity in the process at a location.

20. The method of claim 19 wherein said service levels specifies a minimum percentage of activity as measured by cost of one of the resources.

21. The method of claim 19 wherein said service levels specifies a minimum percentage of activity as measured by volume of one of the resources.

22. The method of claim 1 further comprising the step of specifying a maximum number of sources for one of the resources at a location in the supply chain.

23. The method of claim 1 further comprising the step of specifying a maximum number of sources for the resources at a location in the supply chain.

24. The method of claim 1 further comprising the step of specifying a lead time needed to initiate one of the processes.

25. The method of claim 1, further comprising the step of specifying the fixed costs for one of the processes.

26. The method of claim 1, wherein said step of creating a supply chain model comprises:

defining locations in the supply chain;

defining items in the supply chain; and

specifying which of said items appears at each of said locations.

27. The method of claim 26, wherein said step of creating a supply chain model further comprises the step of defining lanes between said locations.

28. The method of claim 27, wherein at least one lane is created between each location.

29. The method of claim 28 further comprising the step of specifying one of said lanes as a default lane between each location.

30. The method of claim 27, wherein a lane is created between several locations having an identical SKU.

31. The method of claim 27 further comprising the step of identifying one or more manufacturing plants, distribution centers, and storage facilities in the supply chain.

32. The method of claim 31 further comprising the step of identifying one or more customer locations in the supply chain.

33. The method of claim 26 further comprising the step of specifying pre-build time for one of the items, said pre-build time describing the amount of time needed to obtain the item for use in a process.

34. The method of claim 24, wherein each item at each location defines a SKU.

35. The method of claim 34 further comprising the step of specifying a supplier for the SKU.

36. The method of claim 34 further comprising the step of specifying a special delivery requirement for the SKU.

37. The method of claim 34 further comprising the step of specifying a target inventory for the SKU.

38. The method of claim 34 further comprising the step of preserving referential integrity for an item at several of the locations by using the SKU at these locations.

39. The method of claim 34 further comprising the step of designating the SKU as a raw good, a finished good, or a work-in-progress.

40. The method of claim 1, wherein information used to create the supply chain model is imported from an outside data source.

41. The method of claim 1, wherein information used to create the supply chain model is imported from a previously created supply chain model.

42. The method of claim 1, wherein information used to create a first portion of the supply chain model is copied and modified a second portion of the supply chain model.

43. The method of claim 1, wherein predefined data is used to create a portion of the supply chain model.

44. The method of claim 1, further comprising the step of itemizing tax and tariff information.

45. A system for optimizing a supply chain, the system comprising:

an input device for defining a supply chain model;

a storage device for storing said supply chain model; and

an optimizer for forming an optimal configuration for said supply chain model.

46. The system of claim 45 further comprising a display device for displaying said optimized supply chain model.

47. The system of claim 45, wherein supply chain model describes the processes in the supply chain.

48. The system of claim 47, wherein the supply chain model describes the resources, items, locations, and lanes in each of the processes.

49. The system of claim 45, wherein said optimizer comprises a linear programmer.

50. The system of claim 45, wherein said linear programmer performs heuristics when processes in the supply chain model are non-linear.

51. The system of claim 45 wherein said input device is connected to said optimizer through network connection.

52. The system of claim 51, wherein said network connection is the Internet.

53. A program storage device readable by a machine, tangibly embodying a program of instructions executable by a machine to perform method steps of optimizing a supply chain, the supply chain model having locations, items, and processes in the supply chain, the method steps comprising:

forming a supply chain model representing the locations, items, and processes in the supply chain;

defining optimization conditions for said supply chain model; and

determining an optimal configuration for the processes in said supply chain model in view of said optimization conditions.

54. The program storage device of claim 54 further comprising the method steps of:

analyzing the optimal configuration for the supply chain;

reconfiguring the supply model as desired; and

re-optimizing the supply chain model.